SUBMIT IN TRIPLICATE.

Form approved. Budget Bureau No. 42-R1425.

UNDED STATES EPARTMENT OF THE INTERIOR	(Other instruction of one	3. LLARE DENIGNATION AND SEE
TANTMENT OF THE VIEW		1114078

	DEPARTMENT	OF THE INTERI	UK		5. LLARE DESIGNATION A	IND BELLIAL NO.
		ICAL SURVEY		}	บ14078	
APPLICATION	FOR PERMIT TO	D DRILL, DEEPE	N, OR PLUG B	ACK_	C. IF INDIAN, ALLOTTEL	OR THIRE NAME
TARE OF WORK	LX	DEEPEN	PLUG BAC	1	Proposed Diamon	D Canyon #
OIL GAI	LL X OTHER	SIN ZON	GLE X MULTIPL	<u>- </u>	8. FARM OR LEASE NAM Tenneco USA	
NAME OF OPERATOR					9. WELL NO.	
	Oil Company				15=15	
720 So.	Colorado Blvd.,	Denver, Colorad	o 80222		W COU	THEDCAT
LOCATION OF WELL (Re	port location clearly and i	D WCCOLQUECC MILE BELL ST	ate requirements.		Entrada Test	ilk.
333.8	FSL, 1522.0 FEI	· /	<u>.</u>		AND SURVEY OR AR	Z.A
At proposed prod. zone			OC.		Sec. 15, T188	R22E
		CO THE COLUMN TWO TO THE COLUMN TWO	•		12. COUNTY OR PARISE	13. STATE
	ND DIRECTION FROM NEAR	EBT TOWN OR PUST OFFICE			Grand	Utah
See Exhi	bit V	16.188	OF ACRES IN LEASE	1 17. NO. C	OF ACRES ASSIGNED	
LOCATION TO NEAREST			640	TOT	360 uni	it well
PROPERTY OR LEASE L.	unit line, if any)	333.8'	NOSED DEPTH X	20. BOTA	RY OR CABLE TOOLS	
5. DISTANCE FROM PROPO TO NEAREST WELL, DI OR APPLIED FOR, ON THI	OSED LOCATION®	19. Fin	TYOOG ENHOU	P	Rotary	NEW WILL STARTS
1. ELEVATIONS (Show who 6061 GR					October 1	980
9	P	ROPOSED CASING AND	CEMENTING PROGRA			
BIZE OF BOLE	SIZE OF CABING	WEIGHT PER FOOT	SETTING DEPTH	1	QUANTITY OF CEME	<u>NT</u>
DIDE 0. 11				·	* · · · · · · · · · · · · · · · · · · ·	_
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NICKENS and ASSOCIATES P.O. Box 727 Montrose, Colorado 81401

Phone: (303) 249-3411

September 16, 1980

Mr. M. L. Freeman Tenneco Oil Exploration and Production 720 South Colorado Boulevard Denver, CO 80222

Dear Mr. Freeman:

We have completed cultural resource inspections of Tenneco USA Locations 15-15 and 12-10, situated in Grand County, Utah. No cultural resources, either historic or prehistoric, were noted along the proposed access routes nor on the staked boundaries of the well pads. Cultural resource clearance has therefore been recommended and copies of the report have been forwarded to the appropriate federal review offices.

Our invoice to cover this work is enclosed.

Sincerely,

Paul R. Nickens, Ph.D. Principal Investigator

PRN/j **Enclosures**

7-

BLM Grand Resource Area Office BLM Moab District Office BLM Utah State Office U.S. Geological Survey Office

> SEP 18 1980 TENNECO OIL CO. DENVER

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United States Department of the Interior

IN REPLY REFER TO 3100 (U-603)

BUREAU OF LAND MANAGEMENT

Moab District Grand Resource Area P. O. Box M Moab, Utah 84532

July 15, 1980

Mr. Lee Freeman Tenneco Oil 720 S. Colorado Blvd. Penthouse Denver, CO. 80222

Reference:

CONSERVE

Well: USA 15-5 15-15 AS Requested

Section 15, T. 18 S., R. 22 E.

Grand County, Utah

Dear Mr. Freeman:

This office has no objections to staking the above referenced location. Would you include your bond number when submitting your application to drill. In addition you should be knowledgeable that Grand County requires a permit if you plan to use a county road as a portion of your access road. You should contact the County Road Supervisor. A road right-of-way may be required on access to this location. You should be knowledgeable that the proposed location is within a wilderness unit (100c) but outside a proposed Wilderness Study Area. Final determination will come about late fall 1980. An archaeological clearance must be obtained after staking the site.

Sincerely yours,

C. Délano Backus

Area Manager

ACTING

EECEIVE!

🏝 JUL 2 1 1830

TENNESS DENVER

Save Energy and You Serve America!

TENNECO OIL COMPANY ROCKY MOUNTAIN DIVISION PENTHOUSE, 720 SOUTH COLORADO BOULEVARD DENVER, COLORADO 80222

DRILLING PROCEDURE

DATE:	August	8,	1980
-------	--------	----	------

LEASE: Tenneco USA

WELL NO.: 15-15

FIELD: Diamond Canyon

LOCATION: 333.8 FSL, 1522.0 FEL

Section 15, T18S, R22E Grand County, Utah

ELEVATION: 6060

TOTAL DEPTH: 7000

PROJECTED HORIZON: Entrada

SUBMITTED BY:	Bruce Ladd	DATE:	8-8-80
30MITTED 2			=
APPROVED BY:	John W. Chun	DATE:_	8/29/80
APPROVED BIT.			**

CC: Administration DSB Well File Field File

ESTIMATED FORMATION TOPS

Mesa_ Verde	Surface	
Manēos	2610	
Castlegate	2910 (Water or Gas)	
Frontier	3410	
Dakota Silt	6010	
Dakota	6135 (Gas)	
Morrison	6285 (Water or Gas)	
Salt Wash	6525 (Water or Gas)	
Entrada	6910 (Water or Gas)	
TD	70 00	

LLING, CASING, AND CEMENT P

- 1. MIRURT.
- 2. Set 1-3 jts. of 9 5/8" casing as needed to be used as conductor pipe.
- 3. Install casing head and nipple up rotating head and bloose line.
- 4. =Drill 8 3/4" hole to 3150'or 200 feet into the Castlegate Formation.
- 5. Run 7", 23#, K-55, ST&C surface casing to T.D. Cement with sufficient volume to circulate cement to the surface.
- 6. WOC. Nipple up BOP's, rotating head, choke manifold, etc. Pressure test BOP's, manifold, etc. to 1000 psi for 15 minutes.
- 7. TIH and displace water in casing with air. Drill out shoe and dry up hole.
- 8. Drill 6 1/4" hole to T.D.
- 9. Log well as per G. E. Department recommendations.
- 10. If well is productive, run 4 1/2", 10.5#, K-55, ST&C casing to T.D. Cement with sufficient volume to cover all possible productive zones.
- 11. If the well is non-productive, P & A as per Regulatory Agency Specifications.

CASING PROGRAM

CONDUCTOR:

30' to 125' as needed. 9 5/2", 36#, K-55, ST&C.

SURFACE:

3150' +, 7", 23#, K-55, ST&C

PRODUCTION:

7000' , 4 1/2", 10.5#, K-55, ST&C

MJD PROGRAM

- 1. Anticipate drilling entire hole with air.
- 2. In the event liquids are encountered, mist drilling will be attempted.
- 3. Should mist drilling be unsuccessful, the hole will have to be mudded up.
- 4. Also, if gas is encountered in sufficient volume to compromise the safety of the operations, mudding up will be required.
- 5. If mudding up is necessary, the following guidelines should be followed.
 (1) Weight ± 9.0 ppg. (2) Vis. as needed to clean hole. (3) W.L. loccor less.

EVALUATION

Cores and DST's: No cores or DST's are anticipated.

Deviation Surveys:

0- 3200' 2 1/2°) Surveys to be run every 500' or on trips, whichever comes first. Record surveys on IADC Drilling Report Sheet.

Maximum allowable deviations: (1) 1° change per 100' intervals (2) $2 \frac{1}{2^{\circ}}$ at surface casing

(2) 2 1/2° at surface casing setting depth.

(3) 5° at T.D.

In the event that the maximum allowable deviations are exceeded, the Denver Off ice of Tenneco Oil Company will be notified immediately.

Samples: NONE.

Logs:

SNP/GR) FDC/CNL FDC/GR) Air drilled. DIL/LL3
DIL)

FDC/CNL) Mud Drilled.

BLOWOUT EQUIPMENT

- 1. Double ram hydraulic with pipe and blind rams operated by an accumulator.
- 2. Rotating head on air/mist holes.
- 3. Preventors must be checked for operation every 24 hours. This check MUST BE RECORDED on the IADS Drilling Report Sheet.

REPORTS

Drilling reports for the past 24 hours will include depth, footage, time distribution, activity breakdown, mud properties, bit record, bottom hole assembly, daily and cumulative mud costs, plus any other pertinent information, will be called into Tenneco Oil Company, Denver, Colorado, between 7:30 a.m. and 8:00 a.m.

- 1. 303-758-7130 (Office) Don Barnes 303-758-7287 (Office) Don Barnes' private line, Monday-Friday (before 7:45 a.m.) 303-936-0704 (Home) Don Barnes, weekends and holidays.
- 2. George Ramsey (Home) 303-771-5154.
- 3. John Owen (Home) 303-795-0221.

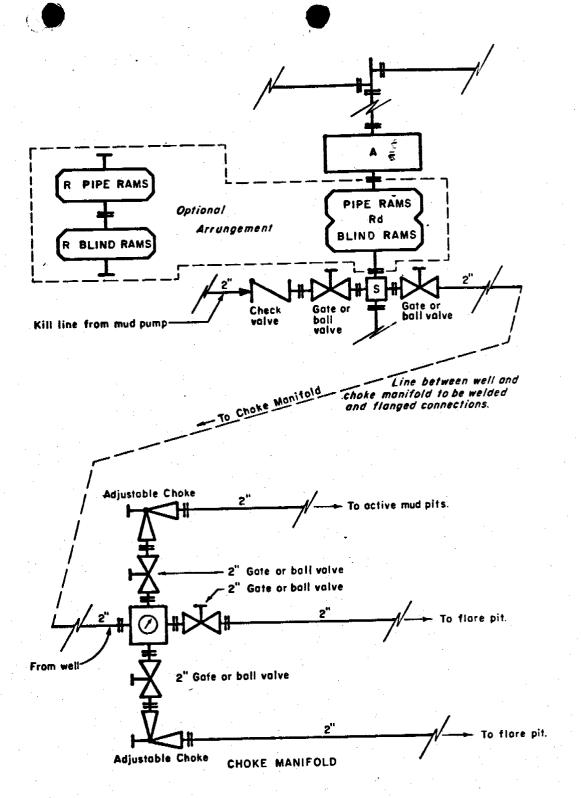
The yellow sheet of the IADC Report is to be filled out completely. The original copy of the drilling time recorder, and copies of any invoices from this well, signed and received for Tenneco Oil Company, will be mailed daily to:

TENNECO DIL COMPANY
ROCKY MOUNTAIN DIVISION
PENTHOUSE, 720 SOUTH COLORADO BOULEVARD
DENVER, COLORADO 80222

ATTENTION: Drilling Department

IN CASE OF EMERGENCY, NOTIFY THE FOLLOWING:

- 1. M. Don Barnes, Division Drilling Engineer.
- 2. Mr. George E. Ramsey, Jr., Drilling Engineers Supervisor
- 3. Mr. John W. Owen, Project Drilling Engineer.
- 4. Mr. Mike Lacey, Division Production Manager (Home 303-979-0509).



All equipment to be 3,000 psi working pressure except as noted.

- Rd Double ram type preventer with two sets of rams.
- R Single ram type preventer with one set of rams.
- S Drilling spool with side outlet connections for choke and kill lines.
- A Annular type blowout preventer.

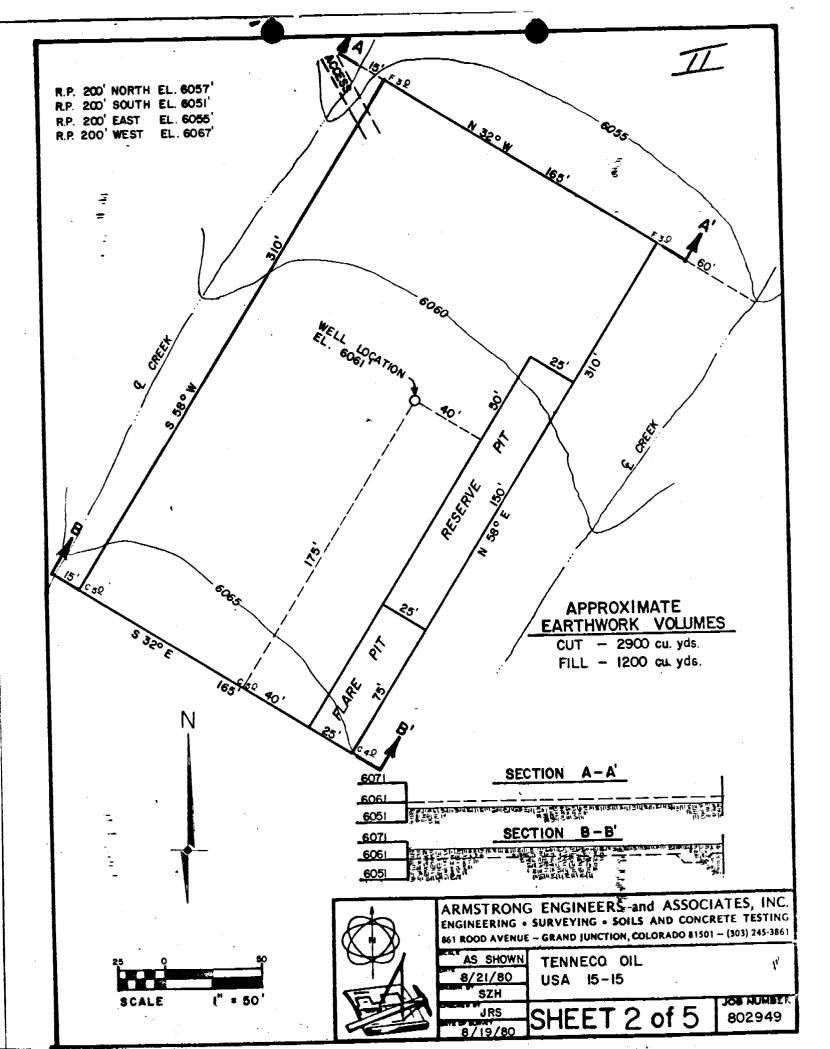
ARRANGEMENT B

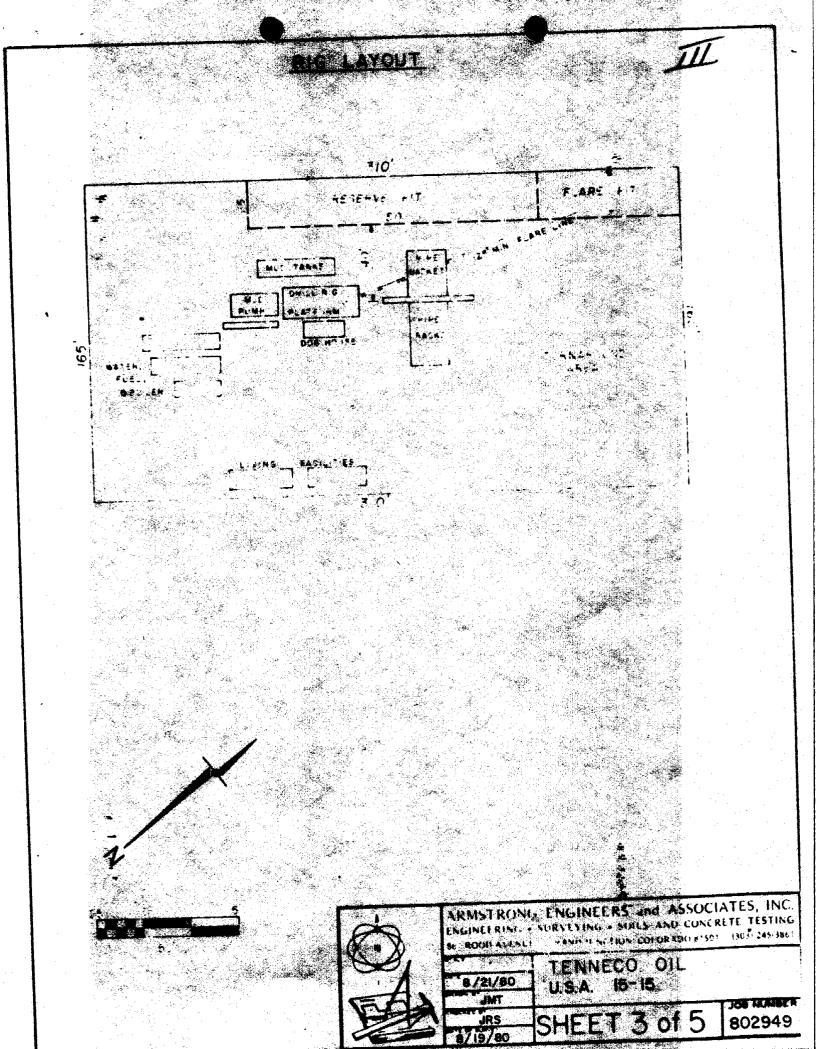
TENNECO OIL COMPANY ROCKY MOUNTAIN DIVISION

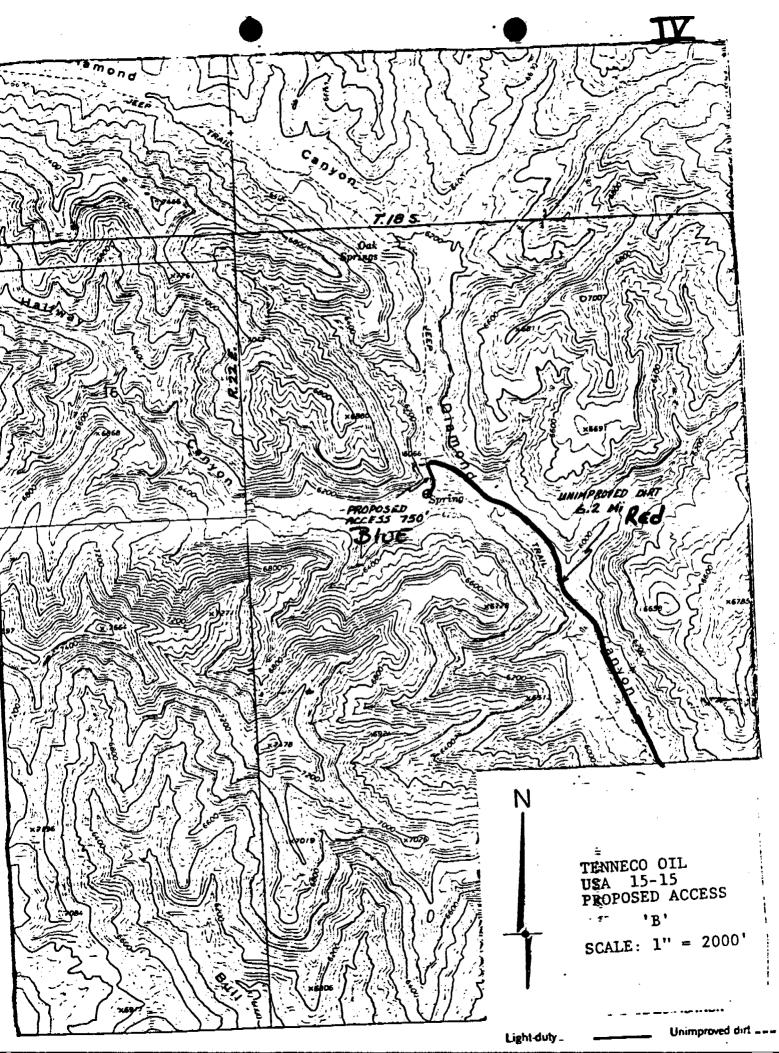
REQUIRED MINIMUM BLOWOUT PREVENTER AND CHOKE MANIFOLD

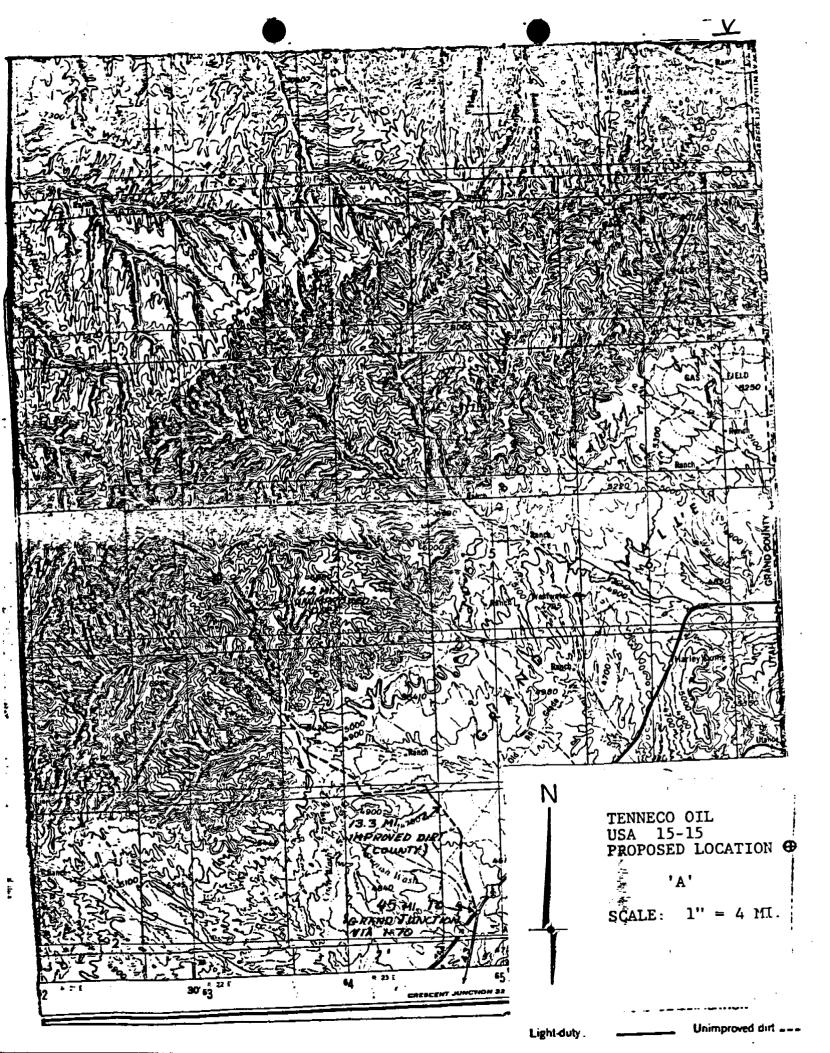
MAGILL 10-28-79

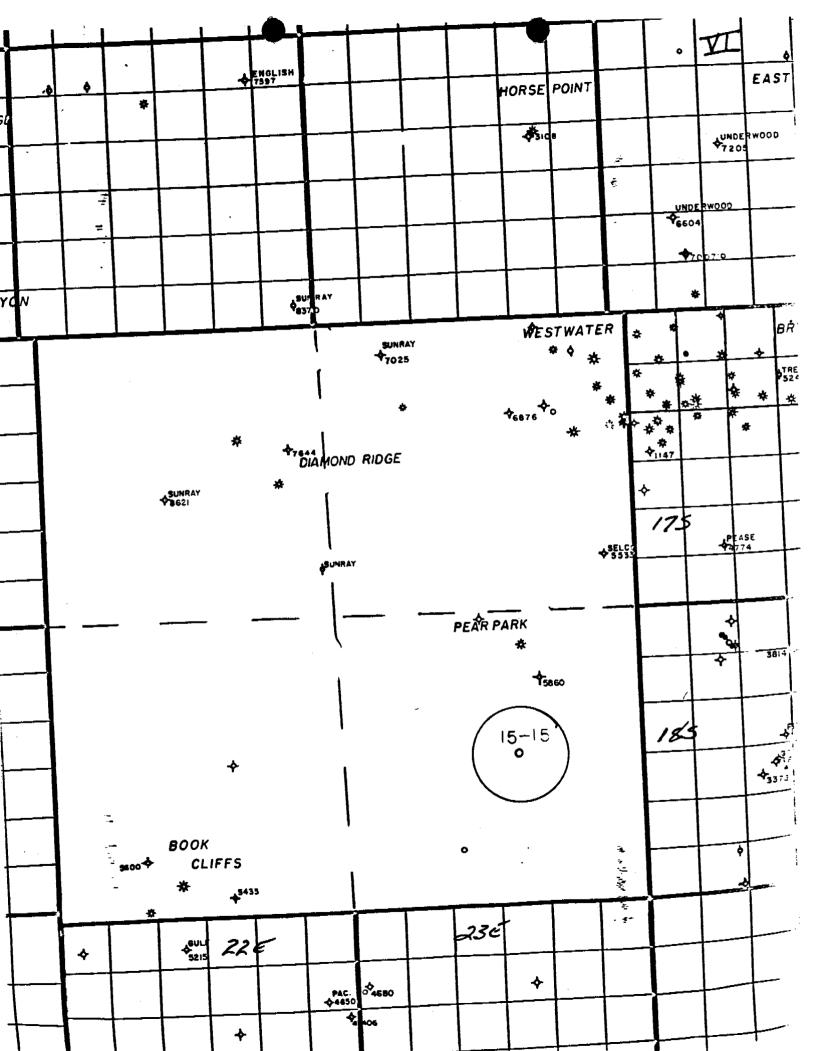
-79 EV

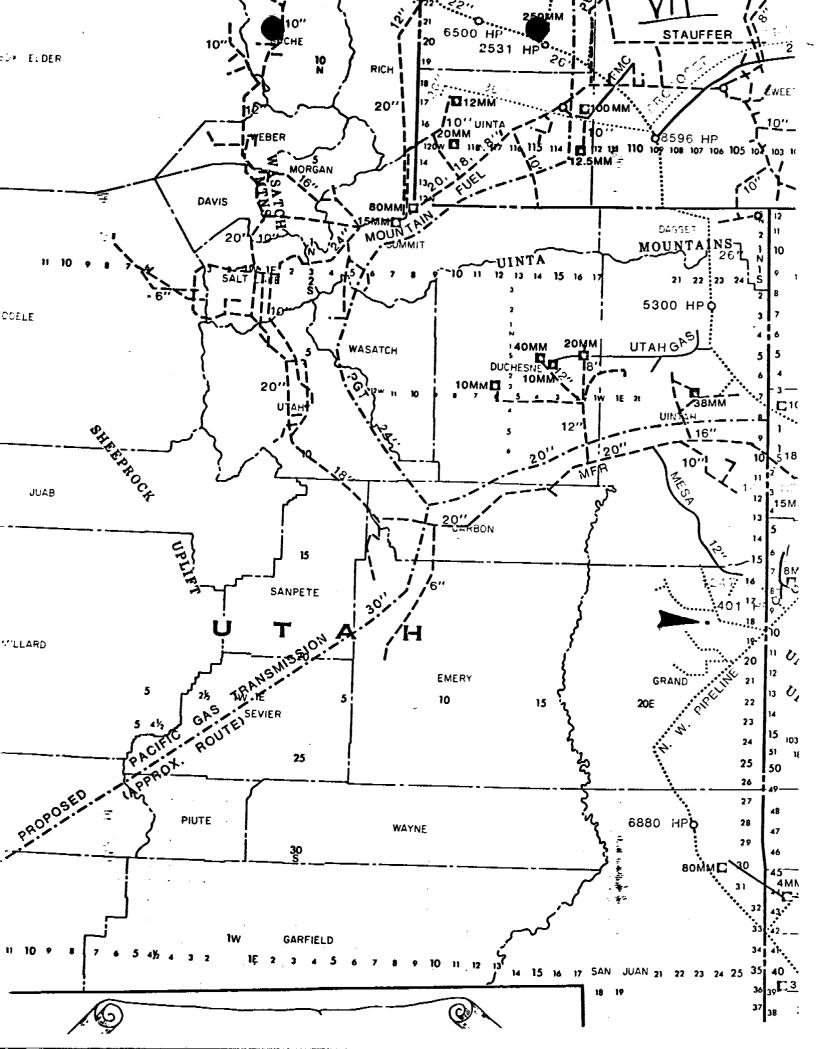












I. EXISTING ROADS

- (a) Proposed Well Site Location:
 As surveyed by a registered land surveyor is located_333.8 FSL,
 1522.0 FEL, Section 15, T18S, R22E, Grand County, Utah.
 - See Exhibit I.
- (b) Planned Access Route: See Exhibits IV & V.

(c) Access Road Labelled:

Color Code: Red - Improved surfaced roads
Blue - New access road to be constructed.

- (d) Not applicable, the proposed well is a development well.
- (e) The existing roads are show in Exhibits IV & V.
- (f) Existing Road Maintenance or Improvement:

The existing road will require minor improvements. However, this road, along with the new access road, may require occasional grading to return the road surface to a cross section necessary for proper drainage.

II. PLANNED ACCESS ROUTE

(a) Route Location - (See Exhibits IV & V)

The planned new access route was selected to provide the shortest distance to the well site with acceptable grades from the main connector road. Temporary access will be built initially, if the facility is productive, the temporary road will be improved as follows:

- (1) Width:
 The average dirt width will be twenty feet. The average traveled surface width will be twenty feet. Road construction will be in accordance with typical roadways requested by the U. S. Bureau of Land Management.
- (2) Maximum Grades:
 The maximum grade allowed will be 15%, however, this may vary as topographical conditions vary. Due to the canyon bottom minimal grades are expected.

- (3) Turnouts: Turnouts are not required
- Prior to construction of the new access road, the brush and topsoil will be windrowed to each side of the alignment outside construction limits. The subgrade surface will be a minimum elevation of one foot above ditch grade. The road surface will be center crowned and the inslopes will have a maximum slope of 3:1 and fill slopes will be a maximum of 2:1.
- (5) Culverts Use, Major Cuts and Fills: Culverts will be placed as needed and suggested by the BLM.

Max: cut - minimal

- (6) Surfacing Material:
 The proposed permanent access road will be constructed with native material.
- (7) Gates, Cattleguards, Fence Cuts:
 Not needed
- (8) New portion of road will be center flagged

III. LOCATION OF EXISTING WELLS

The proposed well is a development well. Exhibit VI shows existing wells within a one mile radius.

- A. Water Wells: N/A
- B. Abandoned Wells: N/A
- C. Temporarily Abandoned Wells: N/A
- D. Disposal Wells N/A
- E. Drilling Wells N/A
- F. Producing Wells: EXECUTABLE N/A
- G. Shut-In Wells: N/A
- H. Injection Wells: N/A
- I. Monitoring or Observation Wells: None.

IV LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. Existing facilities within one mile owned or controlled by Lessee/Operator:

(1) Tank batteries - None

(2) Production facilities - None

(3) Oil Gathering Lines - None

(4) Gas Gathering Lines - None

(5) Injection Lines - None

(6) Disposal Lines - None

- B. New Facilities in the Event of Production:
 - New facilities: well head, condensate tank, production unit, meter house all constructed on disturbed ground.
 - 2. Dimension of the facilities are shown in Exhibits II & III.
 - 3. Construction will be to strip the topsoil, level drilling pad. Dehydrator pits will be constructed with soil materials native to the site. Construction methods will be employed to assume that no drainage flows are impounded to prevent the loss of any hydrocarbon from the site. This is to be done in a manner to facilitate rapid recovery and clean up.
 - 4. Protective measures to protect wildlife and livestock:
 Dehydrator pits shall be overhead flagged should any
 hydrocarbon material be present on the surface. The dehydrator pits shall be fenced to prevent entry of livestock
 or wildlife.
- C. Plan for rehabilitation of disturbed areas no longer needed for operations after construction completed:

Upon completion of well, areas required for continued use will be graded to provide drainage and minimize erosion. Those areas not required for continued usage will be graded to provide drainage and minimize erosion. Those areas unecessary for use will be graded to blend with the surrounding topography. Topsoil will be replaced on those areas and seeded according to BLM specifications.

V. LOCATION AND TYPE OF WATER SUPPLY

- (a) The water source has not yet been determined but will be from a legal private source.
- (b) Water Transportation system: Water to be hauled in trucks from an undetermined pick up point.
- (c) Water Wells: None

VI. SOURCE OF CONSTRUCTION MATERIALS

(a) Materials:

Construction materials will consist of soil encountered with the boundaries of the proposed site. Topsoil will be stripped to a depth of six inches and stockpiled in an area that does not interfear with operations.

(b) Land Ownership:

The planned site and access roads lie on Federal land administered by the United States Department of Interior, U.S. Bureau of Land Management.

- (c) Materials Foreign to Site: NA
- (d) Access road shown under item II

VII. METHODS OF HANDLING WASTE MATERIALS

(a) Cuttings:

Will be contained within the limits of the reserve pit.

(b) Drilling Fluids:

Will be retained in the reserve pit.

(c) Produced Fluids:

No substantial amount of water is expected. The amount of hydrocarbon that may be produced while treating will be retained in the reserve pit. Previous to clean up operations the hydrocarbon materials will be skimmed or removed as the situation would dictate.

(d) Sewage::

Sanitary facilities will consist of at least one chemical toilet. Waste will be contained in a pit and backfilled immediately following the drilling operations or removed to a sanitary disposal facility.

(e) Garbage:

A burn cage will be constructed and fenced with small mesh wire. The refuse will be removed from the area and taken to a landfill.

(f) Clean up of well site:

After drilling, the surface of the drill pad will be cleaned and graded to accommodate a completion rig. The "mouse hole and rat hole" will be backfilled to prevent injury and hazard for livestock. Reserve pit will be fenced until dry and it can be backfilled and restored to natural terrain.

VIII. ANCILLARY FACILITIES

None required.

IX. WELL SITE LAYOUT

- See Exhibits
- 2. Location of pits: Exhibits II & III
- 3. Rig Orientation: Exhibits II & III
- Pits will be unlined, unless otherwise required.

X. PLANS FOR RESTORATION OF SURFACE

A. Reserve Pit Cleanup:

The pit will be fenced prior to rig release and shall be maintained until clean up. Previous to backfill operation, any hydrocarbon material on the pit surface will be removed. The fluids and solids contained in the pit shall be backfilled with soil excavated from the site and with soil adjacent to the reserve pit. The restored surface of the reserve pit will be contoured to prevent impoundment of any drainage flows. The gradient of the surface will be maintained to prevent sudden acceleration of drainage flows which could cause continued erosion of the surface. Following backfill completion, topsoil removed from the disturbed areas will be replaced in a uniform layer. The reserve pit will be seeded per Bureau of Land Management recommendation during the appropriate season following final restoration of the site.

B. Restoration Plans - Production Developed:

The reserve pit will be backfilled and restored as described under Item A. In addition, those disturbed areas not required for production will be graded to blend with the surrounding topography. Topsoil will be placed on these areas and seeded. The portion of the drill pad required for production and turning areas will be graded to minimize erosion and provide access to production facilities under inclument conditions. Following final improvement and surfacing of that portion of new access road, the topsoil windrowed to each side of the alignment will be placed on the cut slopes. Following depletion and abandonment of the site, restoration procedures will be those that follow under Item C.

C. Restoration Plans - No Production Developed:

Of course the reserve pit will be restored as described above. With no production developed, the entire surface disturbed by construction of the drilling pad will be restored to its natural terrain and reseeded per Bureau of Land Management requirements.

XI. OTHER INFORMATION

- A. Surface Description:
 The proposed site is located in Halfway Canyon which is a Western tributary of Diamond Canyon. The topography is slightly rolling. The soils are sandy, fractured sandstone supporting sage, juniper, rabbit brush and native grasses.
- B. Other Surface Use Activities: The surface is federally owned and managed by the BLM/USGS. The predominant surface use is mineral exploration and production.
 - C. Proximity of Water, Dwelling, Historical Sites:
 - 1. Water: A small spring exists in the area but should not be disturbed during construction.
 - Occupied Dwellings: Not existing.
 - Historical Sites: An Archaeological Reconnissance has been performed for this location and clearance has been granted.
 Report is attached.

XII. OPERATOR'S REPRESENTATIVE

Field Personnel who can be contacted concerning compliance of this Surface Use Plan are as follows:

Donald Barnes
720 So. Colorado Blvd.
Denver, Colorado 80222
Office: (303) 758-7130
Extension 212

M. L. Freeman
720 So. Colorado Blvd.
Denver, Colorado 80222
Office: (303) 758-7130
Extension 280

XIII. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions as they actually exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the proposed work performed by Tenneco Oil Company and its contractors and sub-contractors will conform to this plan.

DATE: 1-15-81

M. L. Freeman Staff Production Analyst

U.S. Department of the Interior	BLM Report ID No.
Bureau of Land Management Utah State Office	Report Acceptable Yes No
Summary Report of nspection for Cultural Resources	Mitigation Acceptable Yes No Comments:
Penort Title: TIW O D R I L L P A D	
Report Title: TWO DRILL PAD	40
Development CompanyTenneco	A Antiquities Permit No. 80-UT-034
Report Date $9 16 1980$ Responsible Institution $N C C C C C $	4. Antiquities Permit No. 80-UT-034 [8] [A[S[S[O]C] County Grand
. 41	79 12121E1 Section(s) 12
TWN [1 8 S] Rang	ge 2 2 E Section(s) 1 2 72 73 74 75 76 77 76 77 72 73 74 75 76 77 76 77 77 78 78 78
Resource Area G R TWN Range Ran	98 101
PO: PONY EXPRESS, BR: BEAR RIVER, PR: PRICE RIVE BC: BOOK CLIFFS HR: HOUSE RANGE SE: SEVIER RIV HM: HENRY MOUNTAINS, BE: BEAVER RIVER, DX: DI HM: HENRY MOUNTAINS, BE: BEAVER RIVER, DX: DI KA: KANAB ES: ESCAL ANTE, SJ: SAN JUAN, GR: GI KA: KANAB ES: ESCAL ANTE, SJ: SAN JUAN, GR: GI SR: SAN RAFAEL, DM: DIAMOND MOUNTAIN,	V=Vernal Meridian K V=Vernal Meridian K IE Half Township RAND
Description of Examination Procedures:	•
101.151 1 🔟	10. Inventory Type [1]
Linear Miles Surveyed 112 117	R=Reconnaisance I=Intensive
Definable Acres Surveyed 118 123	S= Statistical Sample
Legally Undefinable Acres Surveyed (*A parcet hard to cadastrally locate i.e., tenter of the ca	of section)
Doccointion of Findings (allacii appei	130
No historic or prehistoric resources the proposed well pad boundaries nor corridors. An apparent historic hea north of the pad at Tenneco 15-15.	TOUCH TETE
- Desistan De	coperties Affected:
None	
. Conclusion/Recommendations:	
Cultural resource clearance is recor and 12-10.	nmended for Tenneco Oil USA Numbers 15-15
•	D. D. A. D.
. Signature and Title of Institutional	Officer Responsible Taul
	-Fillicipal
te: Include only requested informatio	n in numbered spaces. Ut \$100-3 (1/50)

TENNECO OIL COMPANY - 10 POINT PLAN

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1. The geological name of the surface formation: Mesa Verde

2 & 3. Estimated Formation Tops:

(See Attached Drilling Procedure)

4. Proposed Casing Program:

(See Attached Drilling Procedure)

- Blowout Preventors:
 Hydraulic double ram. One set of rams will be provided each size drill pipe in the hole. One set of blind rams at all times. Fill line will be 2", kill line will be 2", choke relief line will be 2". BOP's, drills and tests will be recorded in the driller's log. BOP will be tested every 24 hours and recorded in IADC Log.
- Mud Program: (Sufficient quantity of mud and weight material will be available on location).

(See Attached Drilling Procedure.

7. Auxiliary Equipment:

- a. Kelly cock will be in use at all times.
- b. Stabbing valve to fit drill pipe will be present on floor at all times.
- c. Mud monitoring will be visual. No abnormal pressures are anticipated.
- d. Floats at bits.
- e. Drill string safety valve(s) to fit all pipe in drill string will be maintained on the rig floor while drilling operations are in progress.
- Coring, Logging, and Testing Program:

(See Attached Drilling Procedure)

- 9. No abnormal pressures, temperatures or potential hazards such as H₂S are expected to be encountered.
- 10. The drilling of this well will start approximately (October 1980) and continue for 10 to 12 days.

Your office will be notified of spudding in sufficient time to witness cementing operations. Immediate notice will be given on blowouts, fires, spills, and accidents involving life threatening injuries or floss of life. Prior approval will be obtained before appreciably changing drilling program or commencing plugging operations, plug back work, casing repair work or corrective cementing operations.

Tenneco Oil Exploration and Production A Tenneco Company

Rocky Mountain Division

Penthouse 720 South Colorado Blvd. Denver, Colorado 80222 (303) 758-7130

July 7, 1980

Mr. Ed Guynn
U. S. Geological Survey
2000 Administration Bldg.
1745 West, 1700 South
Salt Lake City, Utah 84138

Re: Tenneco State 7-8

NE's, Sec. 7, T18S, R21E

Tenneco State 11-15

SE's, Sec. 11, T19S, R20E

Tenneco USA 12-10

SE's, Sec. 12, T19S, R22E

Tenneco USA 14-1

NE's, Sec. 14, T19S, R23E

Tenneco USA 15-15

SE', Sec. 15, T18S, R22E

Tenneco USA 17-9

S, R20E SE', Sec. 17, T18S, R24E

Tenneco USA 30-16

S, R22E SE', Sec. 30, T18S, R24E

Tenneco State 36-7

NE', Sec. 36, T18S, R20E

Grand County, Utah

Dear Mr. Guynn:

Pursuant to NTL-6 Part II A, a preliminary environmental review is requested prior to the entry on the ground for the purpose of staking the referenced locations, access roads, and other surface use areas.

Please notify us at your earliest convenience of the status of approval.

Yours very truly,

TENNECO OIL COMPANY

M. L. Freeman

Staff Production Analyst

MLF/rr Encls.

cc: Bureau of Land Management Moab, Utah

** FILE NOTATIONS **

DATE	: Odrby 9,1980	
. OPER	ATOR: Jenneco Clil Compa	aus
WELL	NO: Jennew USA # 15	-15
Loca	tion: Sec. <u>/\$</u> T. <u>/85</u>	R. 22E County: Arand
File	Prepared:	Entered on N.I.D:
Card	Indexed:	Completion Sheet:
	API Number	43-019-30770
CHEC	KED BY:	
	Petroleum Engineer:	Murder 1-27-81
اد پ	Called 1. Ferral 10/16/80 16th Nov. show still holding for Educat	eld be in Fallhit. Colled 11-56-80
VU	Director:	
	Administrative Aide: C.3 - too	for to get gte line-look
Y		
APPR	OVAL LETTER:	
.	Bond Required:	Survey Plat Required:
to think	Order No.	0.K. Rule C-3
	Rule C-3(c), Topographic Exception within a 660' radius	n - company owns or controls acreage of proposed site
	Lease Designation	Plotted on Map
	Approval Lette	er written
	Hot Line P.I.	7

SUDMIT IN THE TAXABLE (Other ins'

Form approved. Budget Burcau No. 42-R1425

UNTED STATES TOTOTH.

DEPARTMENT OF THE INTERIOR 5. LLASE DENIGNATION AND SECIAL NO **U14078** GEOLOGICAL SURVEY G. IF INDIAN, ALLOTTEE OF TEIRE NAME APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 7. UNIT AGREEMENT NAME 1s. TIPE OF WORK PLUG BACK Remond Demand C DEEPEN DRILL X b. TIPE OF WELL MULTIPLE . Sone S. PARM OR LEASE NAME X WELL X WELL OTRE Teĥneco USA 2. NAME OF OPERATOR 9. WELL NO. Tenneco Oil Company 15-15 3. ADDRESS OF OPERATOR 10. FIELD AND FOOL, OR WILDCAT 720 So. Colorado Blvd., Denver, Colorado 80222 WELL (Report location clearly and in accordance with any State requirements.") Entrada Test V At surface 333.8 FSL, 1522.0 FEL At proposed prod. zone Sec. 15, T18S, R22E 12. COUNTY OR PARISH | 13. STATE 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE. Grand See Exhibit V 17. NO. OF ACRES ASSIGNED TO THIS WELL 1D. DISTANCE FROM PROPUSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig, unit line, if any) 16. NO. OF ACRES IN LEASE 360 unit well 640 333.8 20. BOTARY OR CABLE TOOLS 18. DISTANCE FROM PROPOSER LOCATIONS
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 19. PROPOSED DEPTH ±70004 Rotary 22. APPROX. DATE WORE WILL START* 21, ELEVATIONS (Show whether DF, RT, GR, etc.) October 1980 6061 GR PROPOSED CASING AND CEMENTING PROGRAM 23. QUANTITY OF CEMENT BETTING DEPTH WEIGHT PEI: FOOT BIZE OF CABING BIZE OF ROLE Circulate to surface ±3150 23# K55 7" new 8 3/4" Cover all productive zones ±7000 10.5# K55 4 1/2" new 6 1/4"

See attached.

Pre-staking request attached.

Archaeology Report attached.

DIVISION OF

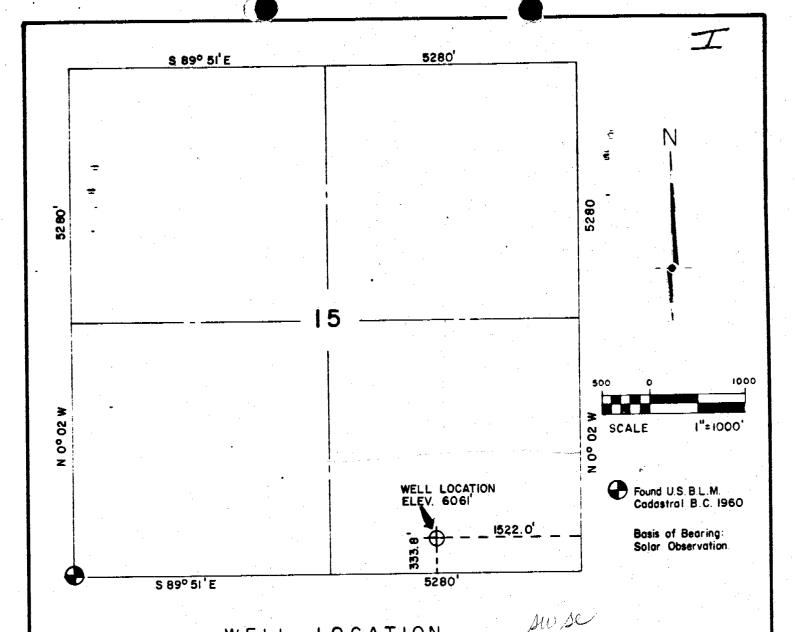
. A. I. J.

OIL, GAS & MINING _ 14-8/ Fodoral Approval Locaived APPROVED BY THE DIVISION OF OIL, GAS, AND MINING

ノースフージ

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

BICKED Memory	EMMOS THE	taff Product	tion Analys	st		15-81
(This space for Federal or State office use)	<u> </u>			1. 16 th		
РЕВИІТ КО.		APPROVAL DATE _		4-	•	
APPROTED BY CONDITIONS OF APPROVAL, IF ANT:	TITLE			;	DATE	· .



WELL LOCATION

333.8 FT.N.S.L. - 1522.0 FT.W.E.L. SECTION 15, T.18S., R.22E., SLB&M GRAND COUNTY, UTAH



NOTE:

Bearings and Distances on North, East, and South lines are Calculated from available 6.L.O. Information.

SURVEYOR'S CERTIFICATE

I, Edward A. Armstrong, a registered land surveyor in the State of Utoh, do hereby certify that this survey was made under my direct supervision and that this plat represents said survey.

EDWARD A ARMSTRONG PEELS 4464



ARMSTRONG ENGINEERS and ASSOCIATES, INC. ENGINEERING • SURVEYING • SOILS AND CONCRETE TESTING 861 ROOD AVENUE -- GRAND JUNCTION, COLORADO 81501 -- (303) 245-3861

"8 /21 /80 U S.A. 15 - 15

SHEET 1 of 5

802949

January 29, 1981

Tenneco Oil Company 720 So. Colorado Blvd. Denver, Colorado 80222

Re: Well No. USA #15-15 Sec. 15, T. 18S, R. 22E Grand County, Utah

Insofar as this office is concerned, approval to drill the above referred to gas well is hereby granted in accordance with Section 40-6-11, Utah Code Annotated 1953; and predicated on Rule A-3, General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer Office: 533-5771

Home: 876-3001

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (Acquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-019-30770.

Sincerely,

DIVISION OF OIL, GAS, AND MINING

Michael T. Minder Petroleum Engineer

Self 24 Phone Line

/ko

cc: USGS

Form 9-331 Dec. 1973

APR 28 1981

Form Approved. Budget Bureau No. 42-R1424

UNITED STATES

U-14078

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY DIVISION O	F 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NOTICES AND REPORTS ON WELLS	7. UNIT AGREEMENT NAME
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)	8. FARM OR LEASE NAME Tenneco USA
1. oil gas well ₩ other	9. WELL NO.
2. NAME OF OPERATOR	15-15
Tenneco Oil Company	10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR	Entrada Test
P. O. Box 3249, Englewood, CO 80155 4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17	11. SEC., T., R., M., OR BLK, AND SURVEY OR AREA
below.)	Sec. 15, T18S R22E
AT SURFACE: 333.8' FSL 1522' FEL	12. COUNTY OR PARISH 13. STATE
AT TOP PROD. INTERVAL:	Grand Utah
AT TOTAL DEPTH:	14. API NO.
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,	43-019-30770
REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD)
DECLIFET FOR APPROVAL TO	6061' gr.
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	and the state of t
SHOOT OR ACIDIZE	
REPAIR WELL	(NOTE: Report results of multiple completion or zone
PULL OR ALTER CASING	change on Form 9-330.)
MULTIPLE COMPLETE	
CHANGE ZONES	
(other) Commence drilling operations/name change	
<u> </u>	
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly stat including estimated date of starting any proposed work. If well is d measured and true vertical depths for all markers and zones pertiner	e all pertinent details, and give pertinent dates, irectionally drilled, give subsurface locations and it to this work.)*
Tenneco proposes to change the name of the above	referenced well to:
Diamond Canyon II Unit USA 15-15	
4/18/81 - MIRURT. Spud well 4/17/81 w/Cardinal pipe. Cmt w/128 sx of Redicrete.	rig #4. Set 40' of conductor
4/19/81 - Drill to 421'. Circ. Short trip. TO 36# csg, set @ 418' cmt w/120 sx Class G w/3% CA down. Circ. cmt to surface.	
4/20/81 - Test well head. Clean mud tank. NU a 1200 PSI. Pipe rams tested to 800 PSI.	nd pressure test blind rams to
Subsurface Safety Valve: Manu. and Type	Set @ Ft.
18. I hereby certify that the foregoing is true and correct	
SIGNED WALLY TOTALE ASST. DIV. Adm.	Mgr. DATE 4/23/81
(This space for Federal or State off	ice use)
APPROVED BY TITLE	DATE
CONDITIONS OF APPROVAL, IF ANY:	

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

쇇칠!	Budget Suresu No. 42-R1424
	5. LEASE U-14078
	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
1	7. UNIT AGREEMENT NAME
_	8. FARM OR LEASE NAME Diamond Canyon Unit USA
	9. WELL NO: 15-15
	10. FIELD OR WILDCAT NAME Entrada Test
7	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 15, T18S-R24E
	12. COUNTY OR PARISH 13. STATE Grand Utah
	14. API NO.
	15. ELEVATIONS (SHOW DF, KDB, AND WE)

SUNDRY NOTICES AND REPORTS ON WELLS	7. UNIT AGREEMENT NAME
Do not use this form for proposals to drill or to deepen or plug back to a different eservoir. Use Form 9–331–C for such proposals.)	B. FARM OR LEASE NAME
1. oil gas A other	Diamond Canyon Unit USA 9. WELL NO.
Well Bull	15-15
2. NAME OF OPERATOR Tenneco 011 Company	10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR Box 3249, Englewood, Colorado 80155	Entrada Test 11. SEC., T., R., M., OR BLK. AND SURVEY OR
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17	Sec. 15, T18S-R24E
AT SURFACE: 333.8' FSL & 1522' FEL AT TOP PROD. INTERVAL:	12. COUNTY OR PARISH 13. STATE Grand Utah
AT TOTAL DEPTH:	14. API NO.
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD) 6061' gr.
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	
SHOOT OR ACIDIZE	(NOTE Report results of multiple completion or zone
REPAIR WELL PULL OR ALTER CASING	-F F 0.330)
MULTIPLE COMPLETE	
ABANDON*	
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly statincluding estimated date of starting any proposed work. If well is a measured and true vertical depths for all markers and zones pertine	in the state of the second with portinent dates.
measured and true vertical depths for all markers and zones pertine	ent to this work.)*
4/28/81. TOOH. Log. RU and run 72 jts. 7" 23# w/400 sx 50/50 POZ, 10% salt, 3% CACLg. 1/4: G neat. Plug down. Circ. 1 bbl. cmt. to su	
squeeze w/10 sx cmt.	Test blind rams to 1500 PSI for
15 mins. Pipe ram to 1000 PS1 for 15 mins, Tag top of cmt @ 2847'. Float collar @ 2893	
resumed drilling 64" hole. 5/8/81. TOOH @ depth of 6598'. Mix mud. Brea	k circ in 7" csg. OK. TIH to 4655 and
lost circ. 5/9/81. Circ and cond mud. TOOH. Pick up fis	hing tools. TIH. Screw into fish and
start jarring. Jar fish 25' up hole. Jars	quit. Ran free point. Free to 5841.
start jarring. Jar fish 25' up hole. Jars Back off drill pipe. Pipe came apart @ 4921 Pull 3 Hole is tight. Circ. and work pip Subsurface Safety Valve: Manu. and Type	Set @Ft.
18. I hereby certify that the foregoing is true and correct	
	.Mgr. DATE 5/18/81
(This space for Federal or State of	office use)
APPROVED BYTITLE	DATE
CONDITIONS OF APPROVAL, IF ANY:	

APPROVED BY CONDITIONS OF APPROVAL, IF ANY:

LEASE		

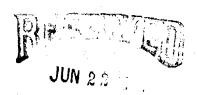
UNITED STATES	5. LEASE				
DEPARTMENT OF THE INTERIOR	U 14078				
GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME				
SUNDRY NOTICES AND REPORTS ON WELLS	7. UNIT AGREEMENT NAME				
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)	Diamond Canyon II Unit USA 8. FARM OR LEASE NAME				
1. oil gas X other	6. FARM UR LEASE NAME				
well well other 2. NAME OF OPERATOR	9. WELL NO. 15-15				
Tenneco Oil Company	10. FIELD OR WILDCAT NAME				
3. ADDRESS OF OPERATOR	Entrada Test				
P. O. Box 3249, Englewood, CO 80155	11. SEC., T., R., M., OR BLK. AND SURVEY OR				
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)	AREA Sec. 15, T18S, R24E				
AT SURFACE: 333.8' FSL & 1522' FEL	12. COUNTY OR PARISH 13. STATE				
AT TOP PROD. INTERVAL:	Grand Utah				
AT TOTAL DEPTH:	14. API NO.				
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA					
	15. ELEVATIONS (SHOW DF, KDB, AND WD)				
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF	(A)				
TEST WATER SHUT-OFF					
FRACTURE TREAT	1				
SHOOT OR ACIDIZE					
PULL OR ALTER CASING	(NOTE: Report results of multiple completion or zone change on Form 9-330.)				
MILL TIPLE COMPLETE	change on Form 9-330.)				
CHANGE ZONES					
ABANDON* (other) Sidetracking Activities	IG				
(other) Sidetracking Activities					
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state including estimated date of starting any proposed work. If well is dimeasured and true vertical depths for all markers and zones pertinent.	all pertinent details, and give pertinent dates, rectionally drilled, give subsurface locations and to this work.)*				
5/11/81. Screw into fish. Jar. Ran free point.					
off @ 4770'. TOOH. Laid down jars etc. TIH.	Screw into fish.				
5/12/81. Jar on fish. Ran freepoint. Attempt t	o cut off @ 5249' w/jet cutter.				
Didn't cut.					
5/13/81. Backed off @ 4770'. Circ. TOOH. TIH	open ended. Circ. RU and cmt w/				
100sx Class H w/.05% NF4-1. Plug in place. T	OOH. Est top of cmt @ 4270'. WOC.				
5/14/81. Trip. Circ. Set plug from 3650-4166'.	100sx Class H w/15#/sk sand and				
.05% NFR-1. Plug down. WOC. Pick up tools.	TIH w/ Dyna drill.				
5/16/81. Pick up bottom hole assy. Go in hole t	o 3966'. Mis-run on survey. Circ				
and cond. TOOH. TIH openended. Set a 65sk C	lass H w/15#/sk NFR-1 cmt plug set				
@ 3947'.	- A the man is a second of the				
Subsurface Safety Valve: Manu. and Type	Set @ Ft.				
18. I hereby certify that the foregoing is true and correct					
SIGNED WALLE DIV. ASST. Ad	m. Mggare 5/27/81				

(This space for Federal or State office use)

DATE

TITLE

GEOLOGICAL REPORT
ON
TENNECO OIL COMPANY
DIAMOND CANYON II, 15-15
GRAND COUNTY, UTAH



DIVISION OF OIL, GAS & MINING

BY
TERRY L. TILTON
FOR
LARSEN GEO LOGGING

GEOLOGICAL SUMMARY

OPERATOR: Tenneco Oil Company WELL: Diamond Canyon II 15-15

Mancos Shale

The resumed drilling operation was sampled beginning at 3720 feet. The predominate lithology of the Mancos is dark gray, silty, firm, calcareous, slightly fissile shale. A dirty gray, 'salt and pepper', very fine to fine grained sandstone with poor visible porosity is found with the shale in samples from 3720 feet to 4070 feet. Background gas in this interval ran from 20 to 50 units of total gas, (1 unit = 100 ppms or .01% gas), with connection gas up to 75 units. Samples indicated a few thin sandstone beds were present in the interval between 5050 feet and 5300 feet. A light gray, 'salt and pepper', very fine to fine grained, subangular grained sandstone with brown streaks was found in samples from 5420 feet to 5490 feet. Only the sand in the sample from 5300 feet showed fluorescence, a dull gold color, probably due to a high concentration of bentonite.

Background gas, below the initial shale and sandstone sequence, ranged from 20 to 200 units, with the connection gas at 4450 feet reaching 900 units. The trip gas, 1350 units, at 5330 feet is related to the chromatograph breakdown of 25,000 ppm C_1 ; 1,730 ppm C_2 ; 780 ppm C_3 ; and 900 ppm C_4 .

Frontier Formation

Lithologically similar to the Mancos, the predomiate rock in the samples is a dark gray, firm, silty to sandy, calcareous shale. This shale is distinguished by exhibiting in part of the shale, small, white calcosperes. Associated with the shale is a light gray to white, 'salt and pepper', very fine to fine grained, predominately subangular grained sandstone which makes up 10 to 20% of the samples through the Frontier.

Background gas ran from 200 to 400 units through this section. A background surge of 550 units between 5780 feet and 5785 feet is related to a chromatograph breakdown of 13,000 ppm C_1 ; 3,000 ppm C_2 ; 1,300 ppm C_3 ; and 1,000 ppm C_{Λ} .

Dakota Silt

The Dakota silt is distinguished by a light gray, 'golden' brown, bentonitic, soft, brittle, dense siltstone. This siltstone is not evident in samples taken from the previous air drilled holes through this interval at this site and at the sites 14-1 and 16-4. Apparently, it is reduced to 'dust'

GEOLOGICAL SUMMARY

OPERATOR: Tenneco Oil Company

WELL: Diamond Canyon II 15-15

in drilling and/or transit up the pipe during air drilling. The predominate lithology in the samples taken from this unit is dark gray, silty, calcareous shale. A light gray, clear, 'salt and pepper', very fine to fine grained, subangular grained, friable sandstone is also present in the samples through this unit. Trace quantities of bentonite and pyrite are found.

Background gas reached a high of 1000 units after a 1400 unit connection gas show at 5955 feet. General background then fell to a steady 250 units midway through this interval and continued at that level for the remaining portion. The trip gas, 1500 units, at 6030 feet is related to a chromatograph breakdown of 92,000 ppm C_1 ; 20,000 ppm C_2 ; 7,150 ppm C_3 ; 1,850 ppm C_4 .

Dakota Sandstone

The samples taken through the Dakota Sandstone indicate a dominant lithology of white, clear, clean to clayey, rounded to subangular grained, very fine to fine grained, friable sandstone. An upper and lower sandstone bed is separated in the samples by a dark gray, silty, firm, slightly fissile, calcareous shale.

Background gas ran between 200 and 250 units in the upper sand, and between 100 and 150 units below that. The trip gas coming from the top of the Dakota Sandstone was approximated at 2000+ units, since pegged attenuation settings and a partially clogged air flow line, due to the gas surge in the pit, hampered instrument operation. This was however, the greatest gas episode of this hole. The connection gas, 880 units, at 6187 feet is related to a chromatograph breakdown of 17,350 ppm C_1 ; 3,350 ppm C_2 ; 1,740 ppm C_3 ; 750 ppm C_4 .

Morrison Formation

Approximately 35 feet of Morrison was drilled. In the upper 20 feet, the lithology of the samples is light to medium green, some lavender, non-calcareous claystone with common rounded fine quartz grains. Below this, red, calcareous siltstone is found in the samples.

Background gas dropped from about 140 units through the basal portion of the Dakota Sandstone to 80 units in the Morrison. The trip gas, 845 units, at 6314 feet is related to a chromatograph breakdown of 94,000 ppm C_1 ; 8,320 ppm C_2 ; 2,720 ppm C_3 ; 930 ppm C_4 ; 1,507 ppm C_{4N} .

BIT RECORD

OPERATOR TENNECO OIL COMPANY WELL DIAMOND CANYON II

WELL DIAMOND CANYON II 15-15

BIT NO.	SIZE	MFR.	TYPE		TH OUT	FEET	HOURS	FT/HR
1	12 1/4	REED	HS-51	0	425	425	22 1/2	18.9
2*	8 3/4	HUGHES	osc-3	425	790	365	10	36.5
3	8 3/4	STC	F-2	790	2394	1604	62 3/4	25.6
4	8 3/4	HTC	J-22	2394	2934	540		
5	6 1/4	нтс	osc-3J	2934	3305	371	8 1/2	43.6
6	6 1/4	нтс	osc-3J	3305	4220	915		
7	6 1/4	HTC	J-33	4220	6386	2168	69 1/4	31.3
8	6 1/4	HTC	J-55	6386		206		
8	(Bit #8	stuck &	left in	hole)				
9	6 1/4	HTC	osc-3					
10	6 1/4	CHRIS	MD4355T		3680			
11	6 1/4	HTC	osc-3	3680	3697	17	1	17
12	6 1/4	нтс	osc-3J	3697	3856	159	18 1/2	8.6
13	6 1/4	SEC	M4LJ	3856	3990	134	23	5.8
14	6 1/4	SEC	M4LJ	3990	4264	274	24 1/2	11.2
15	6 1/4	HTC	ONV	4264	4529	265	26 3/4	9.9
16	6 1/4	HTC	J-3	4529	4913	384	30 1/2	12.6

BIT RECORD

OPERATOR Tenneco Oil Company WELL Diamond Canyon II 15-15

BIT	BIT SIZE		MFR. TYPE		DE <u>P</u> TH		HOURS	FT/HR
NO.				IN	OUT			
17	6 1/4	HTC	J+3	4913	5216	303	34 1/2	8.8
18	6 1/4	HTC	OSC-1GJ	5216	5335	119	16 1/2	7.2
19	6 1/4	HTC	LLWO	5335	5472	137	22 1/2	6.1
20	6 1/4	HTC	osc-1gj	5472	5673	201	17 1/4	11.5
21	6 1/4	HTC	OSC-1GJ	5673	5943	270	20	13.5
22	6 1/4	HTC	osc-1gj	5943	6031	88	11	8
23	6 1/4	SEC	m88TF	6031	6061	30	8 1/2	3.5
24	6 1/4	HTC	owv-5	6061	6156	95	17	5.6
25	6 1/4	SEC	m88TF	6156	6303	147	24 3/4	5.9
26	6 1/4	HTC	J - 3	6303	6314	11	5 1/2	
27	6 1/4	SEC	H-7-J	6314	6334	10	8	

TENNECO OIL COMPANY - 10 POINT PLAN

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- 1. The geological name of the surface formation: Mesa Verde
- 2 & 3. Estimated Formation Tops:
 - = (See Attached Drilling Procedure)
 - 4. Proposed Casing Program:

(See Attached Drilling Procedure)

- Blowout Preventors:

 Hydraulic double ram. One set of rams will be provided each size drill pipe in the hole. One set of blind rams at all times. Fill line will be 2", kill line will be 2", choke relief line will be 2". BOP's, drills and tests will be recorded in the driller's log. BOP will be tested every 24 hours and recorded in IADC Log.
- Mud Program: (Sufficient quantity of mud and weight material will be available on location).

(See Attached Drilling Procedure.

- 7. Auxiliary Equipment:
 - a. Kelly cock will be in use at all times.
 - b. Stabbing valve to fit drill pipe will be present on floor at all times.
 - c. Mud monitoring will be visual. No abnormal pressures are anticipated.
 - d. Floats at bits.
 - e. Drill string safety valve(s) to fit all pipe in drill string will be maintained on the rig floor while drilling operations are in progress.
- 8. Coring, Logging, and Testing Program:

(See Attached Drilling Procedure)

- No abnormal pressures, temperatures or potential hazards such as H₂S are expected to be encountered.
- 10. The drilling of this well will start approximately (October 1980) and continue for 10 to 12 days.

Your office will be notified of spudding in sufficient time to witness cementing operations. Immediate notice will be given on blowouts, fires, spills, and accidents involving life threatening injuries or loss of life. Prior approval will be obtained before appreciably changing drilling program or commencing plugging operations, plug back work, casing repair work or corrective cementing operations.

MUD RECORD.

OPERATOR_	Tenne	o 0il (Company	WE	LL_D	iamond	Canyon I	T: 15-15	
DATE	4/22	4/23	4/24	4/25	4/26	4/27	Air Drlg 4/30	Stuck 5/6	5/7
DEPTH	2037	2215	2394	2575	2760	2936	3940	6598	6598
WEIGHT	8.5	8.8	9.0	9.1	9.1	9.2	9.3	9.0	9.0
MUD GRADIENT	.442	.458	.468	.473	.473	.478	.473	.468	.468
FUNNELVIS	36	37	37	37	37	70	48	62	39
PLASTIC VIS	10	10	14	9	8	15	14	16	12
YIELD PT	4	5	6	6	7	25	19	15	2
GEL STRENGTH	1/4	1/4	2/5	1/8	2/9	18/25	5/11	2/9	1/3
PH	11.0	9.5	9.5	9.5	9.5	9.0	8.5	10.5	8.5
FILTRATE API	10.2	6.0	6.0	9.2	12.2	7.2	4.4	7.0	3.8
CAKE	2/32	2/32	2/32	2/32	3/32	2/32 sponger	2/32	2/32	2/32
ALKALINITY FILTRATE	.25	. 25	.25	.10	.28	.20	.1	.3	.1
CHLORIDE	2000	600	2400	8000	8000	6000	5000	4000	4000
CALCIUM PPM	440	< 40	∢ 40	≺ 40	∢ 40	140	4 0	₹40	< 40
SAND % CONTENT	tr	tr	1/4	1/4	1/4	1/2	1/2	1/4	1/4
SOLIDS % CONTENT	2	2	2 1/4	2 3/4	2 3/4	2 1/2	2 1/2	2 1/4	2 1/4
OIL % CONTENT	ø	Ø	ø	Ø	Ø	Ø	ø	Ø	ø
WATER % CONTENT	98	98	97 1/2	97	97	97	97	97 1/2	97 1/:
rcm									
						1			
L			<u> </u>	<u> </u>	A				<u> </u>

MUD RECORD

OPERATOR_	Tenneco	Oil Co	mpany	WE	LL	Diamor	d Canyo	n II l	515
DATE	5/8	5/9	5/11	5/12	Set (e Ph 5/15	ement igs 5/17	5/18	5/19	5/20
DEPTH	6598	6598	6598	6598	3929	3856	´3556	3571	3648
WEIGHT	8.5	8.8	8.8	8.8	8.9	8.4	8.8	8.8	8.7
MUD GRADIENT	.442	.458	.458	.458	.452	.437	.456	.456	.452
FUNNEL VIS	45	57	61	60	49	34	37	35	40
PLASTIC VIS	22	20	21	21	15	10	12	10	13
YIELD PT	20	10	14	14	8	6	2	1	5
GEL STRENGTH	5	2/8	3/9	3/9	2	1/4	0/3	0/3	1/8
PH	11.0	9.0	8.5	8.5	12.0	11.0	11.0	11.0	11.0
FILTRATE API	3.4	6.0	5.8	5.8	8.6	15.6	12.2	11.2	7.6
CAKE	2/32	2/32	2/32	2/32	2/32	3/32	3/32	3/32	2/3:
ALKALINITY FILTRATE	. 7	.1	.1	.1	1.5	1.8	1.8	1.9	1.3
CHLORIDE PPM	2500	2500	2500	2500	1500	1100	1100	1100	1100
CALCIUM PPM	40	40	40	40	180	160	220	120	50
SAND % CONTENT	tr	1/2	1/2	1/2	1/2	tr	1/2	1/2	1/2
SOLIDS % CONTENT	2	2	2	2	2	2	2 1/2	2 1/2	2 1/
OIL % CONTENT	Ø	Ø	Ø	Ø	Ø	ø	ø	ø	ø
WATER % CONTENT	98	97 1/2	97 1/2	97 1/2	97 1/2	98	97 1/2	97	97
LCM		10	8	8	5			2	10

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MUD PECORD

OPERATOR_	Tenne	eco Oil	Company	WE	LL	Diamond	Canyon	II 15-1:)
DATE	5/21	5/22	5/23	5/24	5/25	5/26	5/27	5/28	5/29
DEPTH	3698	3812	3906	4016	4258	4406	4600	4857	4913
WEIGHT	8.7	8.7	8.8	8.6	8.8	8.7	8.8	8.8	8.9
MUD GRADIENT	.452	.452	.458	.447	.458	.452	.458	.458	.463
FUNNEL VIS	44	39	42	35	42	36	3 5	42	40
PLASTIC VIS	14	12	14	12	14	10	9	15	12
YIELD PT	7	6	6	2	9	6	3	6	5
GEL STRENGTH	2/8	1/6	2/9	1/8	2/8	1/4	0.4	1/6	1/8
PH	11.0	11.0	11.0	10.5	11.0	10.0	9.0	9.0	8.5
FILTRATE API	6.0	6.0	8.0	12	7.6	7.2	8.6	6.8	8.2
CAKE	2/32	2/32	2/32	3	2/32	2/32	2/32	2/32	2/32
ALKALINITY FILTRATE	.9	.9	.9	.9	.4	. 25	.17	.15	.05
CHLORIDE PPM	1100	1100	1100	1000	1000	600	520	450	450
CALCIUM PPM	50	30	30	30	30	430		30	80
SAND % CONTENT	1/2	1/2	1/2	tr	1/2	1/2	1/4	1/4	2 1/2
SOLIDS % CONTENT	2 1/2	2 1/2	2 1/2	2	2 3/4	2 3/4	2 1/2	2 1/2	2 3/4
OIL % CONTENT	ø	Ø	Ø	ø	Ø	Ø	95	ø	
WATER % CONTENT	97	97	97	98	96 3/4	96 3/4	97 1/4	97 1/4	94 3,
LCM	5	5	3	15	10	3	4	5	9

MUD: RECORD

OPERATOR_	Tenneco	011 C	mpany	WE	LL_	Diamond	Canyon	II 15-1	5
DATE	5/30	5/31	6/1	6/2	6/3	6/4	6/5	6/6	6/7
DEPTH	4913	5000	5164	5274	5394	5483	5684	5943	6034
WEIGHT	8.8	9.0	8.9	8.9	9.0	9.0	9.1	9.0	9.2
MUD GRADIENT	.457	.468	.462	.462	.468	.468	.473	.468	.478
FUNNEL VIS	42	35	33	33	34	39	37	40	36
PLASTIC VIS	13	11	10	8	10	15	12	12	12
YIELD PT	8	4	2	2	5	5	6	4	6
GEL STRENGTH	2/8	1/7	1/6	2/6	3/7	4/9	2/8	2/9	2/10
РН	8.5	8.0	8.0	8.5	8.0	8.0	8.5	9.0	9.5
FILTRATE API	8.0	9.6	7.2	6.4	7.2	6.4	8.6	10.0	8.2
CAKE	2/32	2/32	2/32	2/32	2/32	2/32	2/32	3/32	2/32
ALKALINITY FILTRATE	.05	.05	.05	.1	.1	.05-1.5	.05-1.5	.2-1.5	
CHLORIDE PPM	450	450	500	325	200	200	200	200	
CALCIUM PPM		70	60	40	40	56	40	30	30
SAND % CONTENT	2	2	1 1/2	2	2	2	2	2 1/4	2 1/2
SOLIDS % CONTENT	2 1/2	3	2 1/4	2 1/4	3	3	3 1/4	3	3 1/2
OIL % CONTENT	ø	Ø	ø	ø	ø	ø	ø	ø	ø
WATER % CONTENT	95 1/2	95	97 3/4	97 3/4	97	97	94 3/4	94 3/4	94
rcm	9	9	7	5	8	7	6	6	6
	<u> </u>			A	<u> </u>				*************************************

--- luen conce Form 158-

MUS RECORD

Diamond Canyon II 15-15

Tenneco Oil Company WELL

OPERATOR

DATE	6/8	6/9	6/10	6/11					
DEPTH	6098	6190	6303	6334					
WEIGHT	9.2	9.2	9.2	9.2			·		
MUD GRADIENT	.478	.478	.478	.478					
FUNNELVIS	36	39	39	36			·		
PLASTIC VIS	12	12	13	11					
YIELD PT	3	10	10	4	-				
GEL STRENGTH	2/10	4/12	1/8	1/4					
PH	10.0	10	9.5	8.5		,			
FILTRATE API	8.2	8.0	7.2	8.0					
CAKE	2/32	2/32	2/32	2/32					
ALKALINITY FILTRATE	.6-1.6	.6-1.6	.2-1.6	.15-1.8				-21	
CHLORIDE PPM	300	400	400	400					
CALCIUM PPM	30	48	60	40	·				
SAND % CONTENT	2 1/2	2 1/2	2 3/4	2 1/2					
SOLIDS % CONTENT	3 1/2	3 1/2	3 3/4	3 1/2					
OIL % CONTENT	Ø	ø	Ø	Ø					·
WATER % CONTENT	94	94	94	94					
LCM	5	8	5	7					
					,			in the second se	

san juan repro Form 158-1

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES DEPARTMENT OF THE INTERIOR **GEOLOGICAL SURVEY**

5.	LEASE

Form Approved. Budget Bureau No. 42-R1424

U-14078	
** 14070	

6.	IF INDIAN, ALLOTTEE OR TRIBE NAME
7.	UNIT AGREEMENT NAME

	·	
SUNDRY NOTICES AND REPORTS ON WELLS	7. UNIT AGREEMENT NAM Diamond Canyon I	
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)	8. FARM OR LEASE NAME	
1 all	6. TAKIN ON LEAGE WAIL	
1. oil gas well other	9. WELL NO.	
2. NAME OF OPERATOR	15-15	
Tenneco Oil Company	10. FIELD OR WILDCAT NA	ME
3. ADDRESS OF OPERATOR	Entrada Test	AND CUBUCK OF
P. O. Box 3249, Englewood, CO 80155	11. SEC., T., R., M., OR BL	K. AND SURVEY OR
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)	Sec. 15, T18S R2	4E
AT SURFACE: 333.8' FSL 1522' FEL	12. COUNTY OR PARISH	
AT TOP PROD. INTERVAL:	Grand	Utah
AT TOTAL DEPTH:	14 API NO.	1.12 N.12
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,		
REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW D	OF, KOB, AND WD)
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:	6061' gr.	<u> </u>
TEST WATER SHUT OFF		
FRACTURE TREAT	156	
SHOOT OR ACIDIZE		(5) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
REPAIR WELL	(NOTE: Report results of mult change on Form 9-33	
PULL OR ALTER CASING	Un Vi	
CHANGE ZONES	•	2 (S/1)
ABANDON*	OK ONI	
(other)	GA, OVO	
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state including estimated date of starting any proposed work. If well is demeasured and true vertical depths for all markers and zones pertined 5/17/81 - Survey, trip in hole. Circ and conditions.		' <i>V</i> (3)
5/18/81 - TOOH. TIH open ended. Set plug #4		
w/bit and tag plug @ 3510'. Dress plug and ci		C. NOC. 1111
5/19/81 - WOC. Drilled cmt 3510-3571'. Circ	the state of the s	HA. TIH. WO
survey tool.	and cond. Change 2	
5/20/81 - Drill w/Dynadrill 3571-3602'.		
5/21/81 - Circ. Regain circ. TOOH @ 3680'.	TTH Peaming and d	rilling
6/11/81 - Drill to TD @ 6334 . Circ for logs.		
cottom. Circ. TOOH. Log to TD.	. Toon. nic birage	, 20 Scands OII
6/12/81 - Laid down drill pipe. RU and run 13	R9 its 4=1/2" 10 5#	K-55 STC csc w/s
@ 6334' and float collar @ 6298'. Cmt w/100 s		
		(
Plug down. Circ cmt. 6/13/81 - Release rig 6/13/81. RDMORT. Subsurface Safety Valve: Manu. and Type	Set @) Ft.
18. I hereby certify that the foregoing is type and correct		
SIGNED SINGLE STATE ASST. DIV. Adm.	Mgr. DATE 6/18/	81
SIGNED ASST. DIV. Adm.	PAL DATE 0/10/	24

(This space for Federal or State office use)

LEASE DIAM	MOND CANYON
WELL NO	
7 "OD. 23 LB. K-55 CSG.W/	500 sx
TOC & SURFACE.	
4/2 "OD. 10.5 LB. 17-55 CSG.W/	<i>100</i> sx
TOC 0 5300 (BOND LOG).	•
DETAILED PROCEDURE	
I. MIRUSU. Blow WELL HOWN.	NOWH NUBOR
2. POOH WY TBB. RIH WY BAKER CMT	RETAINER AND
TO SOO ON PU ON TEG K PT TEG	to 2000 psi
StING OUT OF RET. X ESTABLISH A	PEYERSE CIRC
	E INTO PERTS -
3. Pump 50 Sx CI & cmt. Disp	lace emt to
EYERSE The clean	. Pull I STAND AND
	d Door
4. Displace hole wy 9 ppg mus	A FOOR
5. MIKHWL UNIT. Chem cut es	6 AT 5200
6. PU CSE CREW. Pull AND lay A	N 412.
7. RIH wy 23/8 to 100' helow 4"	Z STUB.
Spot 50 Sx plug Access STU	<u>8. </u>
8. PU to 3000' AND SPOT SO SK	plug AT
9. PU to 300' AND CLEC CMT to	SUCFACE
(Approx 50 SX).	
10. CUT OFF CASING HEAD AND SE	T PKA MARKER
Ill Fill pits AND CREW location.	
The second secon	
	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	<u>, 1998</u>

FOX

1"@ !934'

195 jts. 38 TBG

ANDED 96177'

6150

8 6/83

CL 6 = 1.15 cuft/sx

4/2 = .016 bb//ft

64 = .038 bb1/ft

7" = .039 bb1/ft.

= 4.9 5x/bb/

UNITED STATES

	Bud	get Bureau	No. 42-R142	4
		-		-
LEASE				

DEPARTMENT OF THE INTERIOR	U-14078
GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NOTICES AND REPORTS WELLS (Do not use this form for proposale to drill or to deepersor plug to shift reservoir. Use Form 9-331-C for such proposals.)	7. UNIT AGREEMENT NAME 3 Diamond Canyon II Unit USA 8. FARM OR LEASE NAME
1. oil gas other	VELL NO.
Z. NAME OF OPERATOR	15-15 10. FIELD OR WILDCAT NAME
Tenneco Oil Company 3. ADDRESS OF OPERATOR P. O. Box 3249, Englewood, CO 8019 74. 4. LOCATION OF WELL (REPORT LOCATION CLEARLY.	Entrada Test
P. O. Box 3249, Englewood, CO 8015	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
below.)	Sec. 15, TIBS RZE
AT SURFACE: 333.8' FSL 1522' FEL AT TOP PROD. INTERVAL:	12. COUNTY OR PARISH 11. STATE Grand Utah
AT TOTAL DEPTH:	14. API NO.
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOT REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD) 6061' gr.
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF	
TEST WATER SHUT-OFF	
SHOOT OR ACIDIZE	(NOTE: Report results of multiple completion or zone
REPAIR WELL UPULL OR ALTER CASING UPULL OR ALTER CASING UPULL OR ALTER CASING UPULL	change on Form 9-330.)
MULTIPLE COMPLETE	
ABANDON*	
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly	
measured and true vertical depths for all markers and zones pe	ertinent to this work.)*
7/29/81 - MIRUSU. Installed BOPS. RIH w/	105 jts 2-3/8" tbg and 3/4" bit.
7/30/81 - Finish RIH w/2-3/8" tbg to PBTD @ PT csg to 4000 PSI. Held ok. Began to swa	
7/31/81 - Finished swabing down fluid level	l for perfg. POOH w/2-3/8" tbg. RII
and perf 6150-65', 6171-83' w/2 JSPF. RIH	w/tbg, F nipple and pkr set 6 6034.
Subsurface Safety Valve: Manu. and Type	Set @ Ft.
18. I hereby certify that the foregoing is true and correct	0/2/07
SIGNED Day MILE Production	
(This space for Federal or S	state office use)
APPROVED BY TITLE	DATE



E	IE INDIAN	AI	LOTTE	ΛĐ	TOIDE	714
	U-14078				The same	
5.	LEASE	4	9.5	-64	4:	υ,

DEPARTMENT OF THE INTERIOR	U-14078
GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to deepen or plug back to a different servoir, Use Form 9-331-C for such proposals.)	7. UNIT AGREEMENT NAME 1900 DIAMON (CANTURE III UNIT USA 8. FARM OR LEASE CAME! OR 9. WELL NO
1. oil gas Kl other	9. WELL NO.
2. NAME OF OPERATOR Tenneco Oil Company	15-15 10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR	Entrade Test 11. SEC., T., R., M., OR BLK. AND SURVEY OR
P. O. Box 3249, Englewood, CO 80155 4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)	AREA Sec. 15, T18S R22E
AT SURFACE: 333.8' FSL 1522' FEL AT TOP PROD. INTERVAL:	12. COUNTY OR PARISH 13. STATE Grand Utah
AT TOTAL DEPTH: 16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,	.14, API NO.
REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD) 6061' gr.
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF: TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE SHOOT OR ACIDIZE	
REPAIR WELL	(NOTE: Report results of multiple completion or zone change on Form 9–330.)
CHANGE ZONES	
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly statincluding estimated date of starting any proposed work. If well is different measured and true vertical depths for all markers and zones pertinent	e all pertinent details, and give pertinent dates, lirectionally drilled, give subsurface locations and nt to this work.)*
8/1/81 - Acidize perfs 6150-65', 6173-83', use slr balls. Release pkr and RIH to 6190' to kn well down. Pulled up hole and set pkr @ 6017' up.	ed 500 gals 7 1/2% acid and 40 RCN nock slr balls off perfs. Swabbed
8/2/81 - RDMOSU. 8/14/81 - MIRUSU. 8-15/81 - RIH w/ 2 3/8" tbg open ended F nippl	
gals 67% quality foam and 65680# 20/40 sand @ pit after 2 hrs on 1/2" tapped bull plug. 8/16/81 - SICP 200 psi. Flowing back frac. I	
8/17/81 - RDMOSU.	landed eby e of 75. Abbot, nomi-
Subsurface Safety Valve: Manu. and Type	Sat @ Ft
18. I hereby certify that the foregoing is true and correct	
SIGNED TITLE Production Ar	nalystoare 8/24/81
(This space for Federal or State of	
APPROVED BYTITLE	DATE
CONDITIONS OF APPROVAL, IF ANY:	

Form	approved. t Bureau No.	
Budge	t Bureau No.	42-R355.5.
Section Comments	e de la companya de	

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DEPARTMENT OF THE	INTEDI	\cap
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GEOLOGICAL SUPV		

ee of the in-		Budget Bur	eau N	o. 42-F	t 355
ructions on verse side)	5. LEASE	DESIGNATION	AND	SERIA	L N
	U+14	1078			
7G *	6. IF IN	DIAN, ALLOTTEI	C OR	TRIBE	NAN

WELL COMPLETION OR RECOMPLETION REPORT AND LOG* 6. IF INDIAN, ALLOTTEE OR TRIBE TYPE OF WELL: OIL GAS WELL DBY Other TYPE OF COMPLETION: NAME OF COMPLETION: NAME OF OPERATOR Tenneco Oil Company ADDRESS OF OPERATOR P. O. Box 3249, Englewood, CO 8015 LOCATION OF WELL (Report location clearly and in accordance with the same requirements). 6. IF INDIAN, ALLOTTEE OR TRIBE 7. UNIT AGREEMENT NAME Diamond Canyon II U 6. FARM OR LEASE NAME 15-15 10. FIELD AND POOL, OR WILDCAT Entrada Test
TYPE OF COMPLETION: NEW WORK DEEP DIFF. Other NAME OF OPERATOR Tennéco Oil Company ADDRESS OF OPERATOR P. O. Box 3249, Englewood, CO 8015
TYPE OF COMPLETION: NEW WORK OVER DEEP DIFF. Other NAME OF OPERATOR Tenneco Oil Company ADDRESS OF OPERATOR P. O. Box 3249, Englewood, CO 8015
NEW WOLL WOVER DEEP DIFF. Other 6. FARM OR LEASE NAME NAME OF OPERATOR Tennéco Oil Company ADDRESS OF OPERATOR P. O. Box 3249, Englewood, CO 8015 10. FIELD AND POOL, OR WILDCAT
NAME OF OPERATOR Tennéco Oil Company ADDRESS OF OPERATOR P. O. Box 3249, Englewood, CO 8015 10. FIELD AND POOL, OR WILDCAT
ADDRESS OF OPERATOR P. O. Box 3249, Englewood, CO 8015 10 10 10 10 10 10 10 10 10 10 10 10 10
P. O. Box 3249, Englewood, CO 8015 10 10 11 10 10 10 10 10 10 10 10 10 10
r. O. Dox 3249, Dilgrewood, co oots light to the light to
At surface 333.8' FSL 1522' FEL 11. SEC., T., R., M., OR BLOCK AND SU
At top prod. interval reported below SWSE
At total depth Sec. 15, T18S R22E
14. PERMIT NO. DIVISIONATIFIESUED 12. COUNTY OR 13. STATE
43-019- 281-645 & MINING /-27-8/ Grand Utah
DATE SPUDDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, REB, RT, GR, ETC.)* 19. ELEV. CASINGHE.
4/17/81 6/12/81 9/7/81 6061' gr.
TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., 23. INTERVALS ROTARY TOOLS CABLE TOOL BOW MANY*
6334 6293 0'-TD PRODUCING INTERVAL(8), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 25. WAS DIRECTION
SURVEY MADE
5150 5300 m 1
6150-6183 Dakota No. TYPE ELECTRIC AND OTHER LOGS RUN 27. WAS WELL CORED
DI/SFL) CNFD CPL ACB (BCSL) No
CASING RECORD (Report all strings set in well) CASING SIZE WEIGHT, LB./FT. DEPTH SET (MD) HOLE SIZE CEMENTING RECORD AMOUNT PULL
9-5/8" 36# 418' 12-1/4" 120sx C1-G
7" 23# 2934' 8-3/4" 400sx 50/50 POZ, 100sx Cl-G
7 25# 2554 6 374 405x 50/30 102; 105x 61 3 4 4 100 sx
LINER RECORD 30. TUBING RECORD
SIZE TOP (MD) BOTTOM (MD) SACES CEMENT* SCREEN (MD) SIZE DEPTH SET (MD) PACKER SET (
2-3/8" 6175'
PERFORATION RECORD (Interval, size and number) 82. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED
6150-65' 500 gals 7-1/2% HCL 40 slr
6171-83' @ 2 JSPF 72,000 gals 67% quality for 85,000# 20/40 sand
6171-83' @ 2 JSPF 72,000 gals 67% quality for 85,000# 20/40 sand
6171-83' @ 2 JSPF 72,000 gals 67% quality for 85,000# 20/40 sand
6171-83' @ 2 JSPF 72,000 gals 67% quality for 35,000# 20/40 sand PRODUCTION PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) WELL STATUS (Producing or shut-in)
72,000 gals 67% quality for 35,000# 20/40 sand PRODUCTION FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) wall STATUS (Producing or shut-in) 8/1/81 Flowing Shut-in
PRODUCTION PRODUCTION PRODUCTION FIRST PRODUCTION PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) WELL STATUS (Producing or shut-in) 8/1/81 Flowing Shut-in B OF TEST HOURS TESTED CHOKE SIZE PROD'N. FOR OIL—BBL. GAS—MCF. WATER—BBL. GAS-OIL RATIO
PRODUCTION PRODUCTION PRODUCTION PRODUCTION PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Shut-in Shut-in Shut-in Shut-in Shut-in Shut-in 1/4" orifice—> 9/7/81 3 1/4" orifice—>
PRODUCTION PRODUCTION PRODUCTION PRODUCTION PRODUCTION PRODUCTION PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Note: The production of the production of the pumping of the p
PRODUCTION OIL STATUB (Producing or shwt-in) Shut-in) Shut-in PRODUCTION Shut-in Shut-in PRODUCTION Shut-in Shut-in PRODUCTION Shut-in Shut-in Shut-in Shut-in OIL BBL. GAS-MCF. WATER—BBL. OIL GRAVITY-API (COR) 356 PSI 390 PSI 766
PRODUCTION FIRST PRODUCTION PRODUCTION FIRST PRODUCTION FIRST PRODUCTION SHULL STATUS (Producing or shut-in) Shut-in PRODUCTION Shut-in PRODUCTION Shut-in PRODUCTION Shut-in PRODUCTION Shut-in PRODUCTION Flowing Shut-in PRODUCTION Flowing Shut-in PRODUCTION Flowing Shut-in PRODUCTION FROM Shut-in PRODUCTION Shut-in PRODUCTION FAULUATED Shut-in PRODUCTION FAULUATED Shut-in PRODUCTION Shut-in PRODUCTION FAULUATED Shut-in FAULUAT
PRODUCTION PRODUCTION PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Shut—in Flowing Flowi
72,000 gals 67% quality for 35,000# 20/40 sand PRODUCTION FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) WELL STATUS (Producing or shat-in) 8/1/81 Flowing Shut-in 8/1/81 Shut-in 8/1/81 3 1/4" orifice PROD'N. FOR OIL—BBL. GAS—MCF. WATER—BBL. GAS-OIL RATIO 9/7/81 3 1/4" orifice OIL—BBL. GAS—MCF. WATER—BBL. OIL GRAVITY-API (COR 356 PSI 390 PSI 390 PSI 766 TEST WITNESSED BT To be sold LIST OF ATTACEMENTS
PRODUCTION PRODUC
72,000 gals 67% quality for 35,000# 20/40 sand PRODUCTION FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) WELL STATUS (Producing or shat-in) 8/1/81 Flowing Shut-in 8/1/81 Shut-in 8/1/81 3 1/4" orifice PROD'N. FOR OIL—BBL. GAS—MCF. WATER—BBL. GAS-OIL RATIO 9/7/81 3 1/4" orifice OIL—BBL. GAS—MCF. WATER—BBL. OIL GRAVITY-API (COR 356 PSI 390 PSI 390 PSI 766 TEST WITNESSED BT To be sold LIST OF ATTACEMENTS

number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions. General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency Any necessary special instructions concerning the use of this form and the or both, pursuant to applicable Federal and/or State laws and regulations.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments

Hen 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State should be listed on this form, see Item 35.

Hem 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. Hems 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion); so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in Item 33. Submit a separate report (page) on this form, adequately identified, or Federal office for specific instructions. additional interval to be separately produced for each

parately produced, showing the additional data pertinent to such interval. supplemental parations for this well should show the details of any multiple stage cementing and the location of the cementing tool. (See Instruction for items 22 and 24 above.) Submit a separate completion report on this form for each interval to be separately produced. tem 29:

CORED INTERVALS: AND ALL DRILL-STEM TESTS, INCLUDING AND SHUT-IN PRESSURES, AND RECOVERIES DESCRIPTION, CONVENTS, ETC.
(brackish)
/slight amount gas
•

	UNITED TES THENT OF THE INT EAU OF LAND MANAGE		U-14078	31, 1985 AND SUBLAL BO.
SUNDRY NO	OTICES AND REPOR	ITS ON WELLS plug back to a different reservoir.	C. SP INDIAN, ALLOTTES	
PEL			Diamond Canyo	n II Unit US
Tenneco Oil Company		·		•
P. O. Box 3249, Engl	lewood, CO 80155	RECEIVED	15-15	
P. U. BOX 3249, Engl. ocation of Well (Report location lo	on clearly and in accordance wi	AUG 6 1984	Entrade tes	t
33.8 FSL, 1522 FEL		DIVISION OF OIL	Sec. 15, T1	8S, R22E
PERMIT NO.	16. BLEVATIONS (Show who	PLANT DF, RT, GERSELS, MINING	Grand	Utah
Check	Appropriate Box To India	cate Nature of Notice, Report, or		
NOTICE OF IN	: OF KOITHER	- I	QUENT REPORT OF:	
FRACTURE TREAT	PULL OR ALTER CARING MULTIPLE COMPLETE	PRACTURE TREATMENT	ALTERINO O	-
SHOOT OR ACIDISH	ABANDON® X	SECOTIES OR ACEDISING	TRYNDONME	<u> </u>
REPAIR WELL	CHANGE PLANE	(Other)		
(Other)		Completion on Posser	ts of multiple completion pletion Report and Log fo	P.ZD)
Tenneco requests per	rmission to plug an	pertinent details, and give pertinent date of locations and measured and true vert	e, laciuding estimated da ical depths for all market	te of starting any re and some perti-
Tenneco requests pe	rmission to plug an	pertinent details, and give pertinent date of locations and measured and true vertood abandon the referenced	e, laciuding estimated da ical depths for all market	te of starting any re and some perti-
Tenneco requests pe	rmission to plug an	pertinent details, and give pertinent date or locations and measured and true vert	e, laciuding estimated da ical depths for all market	te of starting any re and somes perti-
Tenneco requests pe	rmission to plug an	pertinent details, and give pertinent date of locations and measured and true vertood abandon the referenced	e, laciuding estimated da ical depths for all market	te of starting any re and somes perti-
Tenneco requests pe	rmission to plug an	pertinent details, and give pertinent date of locations and measured and true vertood abandon the referenced	e, laciuding estimated da ical depths for all market	te of starting any re and some perti-
Tenneco requests per attached detailed pr	rmission to plug an rocedure.	pertinent details, and give pertinent date of locations and measured and true vertood abandon the referenced	e, laciuding estimated da ical depths for all market	te of starting any re and somes perti-
Tenneco requests per attached detailed pr	rmission to plug an rocedure.	APPROVEL	e, including estimated da load depths for all market well according BY THE STA	te of starting any e and some perti- to the
Tenneco requests per attached detailed pr	rmission to plug an rocedure.	APPROVEL	by THE STATE DIVISION OF	te of starting any e and somes perti- to the
Tenneco requests per attached detailed pr	rmission to plug an rocedure.	APPROVEL OF UTAL OIL, GAS	e, including estimated da load depths for all market well according BY THE STA	te of starting any e and some perti- to the
Tenneco requests per attached detailed pr	rmission to plug an rocedure.	APPROVEL	by THE STATE DIVISION OF	te of starting any e and some perti- to the
	rmission to plug an rocedure.	APPROVED OF UTAL OIL, GAS DATE:	by THE STATE DIVISION OF	te of starting any re and some perti-
Tenneco requests per attached detailed procedure is to performing	rmission to plug an rocedure.	APPROVED OF UTAL OIL, GAS DATE: 18/15 BY:	BY THE STATE DIVISION OF AND MINING	te of starting any re and some perti-
Tenneco requests per attached detailed procedure is for performing	racedure. of flis raceived prior work.	APPROVED OF UTAL OIL, GAS DATE:	BY THE STATE DIVISION OF AND MINING	te of starting any e and somes perti-
Tenneco requests per attached detailed protection of performing	racedure. of flis raceived prior work.	APPROVED OF UTAL OIL, GAS DATE: 18/15 BY:	BY THE STATE DIVISION OF AND MINING	te of starting any e and somes perti-

*See Instructions on Reverse Side

Torm 3160-5 November 1983) Formerly 9-331)	UNITED : DEPARTMENT BUREAU OF LANK	THE INTERIO	SUBSET IN TRIPLICATE (Other lastractions on verse adds)	Expires August 31, 1985 5. Least Designation AND SOLIAL NO. U-14078
SUN (Do not use this	BRY NOTICES AND SOME STATE OF THE STATE OF PERSONS AND SOME PERSONS FOR PERSON	REPORTS OF	WELLS k to a different reservoir.	6. S' MEDIAY, ALLOTTES OR TRIBE NAME
1.				T. SHIP ASSESSED NAME
2. HAME OF OFGRATOR	X •====			Diamond Canyon II Unit US/
Tenneco Oil C	ompany			A THE PA
	9, Englewood, CO	R0155		15-15
4. LOCATION OF WELL (9, Englewood, CO Report location clearly and in a low.)	ecordance with any St	ste requirements."	10. FINES AND FOOL, OR WILDCAT
At existe	,			Entrade Test
333	8' FSL, 1522' FEL			11. SEC., E., B., M., OR M.K. AND SURVEY OR AREA
555.	0 130, 1322 122			Sec. 15, T18S, R22E
14. PERMIT NO.	18. BLEVATIO	ns (Show whether se, 2	r, en, etc.)	12. COUNTY OR PARISH 13. STATE
		6061' GR		Grand UT
26.	Guel: Appropriate B	ox To Indicate No	ture of Natice, Report, or	Other Data
	MOTICE OF INTENTION TO:	T.	- Corr	SONDER CONTRACTOR
TEST WATER SECT	PELL OR ALTER	CARINO	WATER SHUT-OFF	SEPARATINO WELL
PRACTURE TREAT	MULTIPLE COM		PRACTURE TREATMENT	ALFREING CARING
SHOOT OR ACTRUM	ABANDON*		SECOTING OR ACEDESING	ABANDONMENT [®] X
REPAIR WELL	CHAPES PLAYS		(Other)(Nors: Report resu	dts of multiple completion on Well
(Other)	a court from ours estate (Flan	riv erate all pertinent	Completion or Reco	mpletion Beport and Log form.) les, including estimated date of starting any tical depths for all markers and sonce perti-
disc & sand. 08/29/84: RI light steady 08/30/84: Ra Held o.k. St retainer, squ 15 sxs cement POOH w/tbg. 08/31/84: Fr 110 jts 4-1/2	H w/2-3/8" tbg to blow. RD swab. Point cement retainer cung out of retainer control to the control of the contr	re wet. Tbg of 6197'. RU swap 120 bbls hon 2-3/8" tbg or, spotted 55 02300 psi & 1, r. POOH w/4 s-1/2" pulling	lisc on top of T/N ab. Swab oily wtr 120 dn tbg. POOH a set @5800'. Pr sxs of Class G ce 72-1/4 BPM. Stung stands tbg & rever nipple. RU GO. 1. Cut 4-1/2" csg	ess tested retainer to 500 p ment in tbg. Stung into out of retainer, dumped se well w/8.8 ppg gel wtr. Pull csg collar thru elevato @ 5000'. Pull & recover
top of retain to surface. 18. I hereby surface argumen	SXS Class G thru	retainer. Sti everse out. head. Insta	Ing out of retaine [IH to 300] Pmb	- of 14V
APPROVED BY	DEDATAL TRANS.		ACCEPTE	
CORDITIONS OF A	PPROVAL, IF ANY:		-APPROVED	BY THE STATE
			OF UTAH	DIVISION OF

Title 18 U.S.C. Section 1001, makes it a crime for any person knowing! Pand willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Formerly 9–331) DEPARTN	UNITED STATES ME OF THE INTER U OF LAND MANAGEMEN		Expires Augu 5. Mars Augustes U-44078	u No. 1004-0135 st 31, 1985
SUNDRY NOT (Do not use this form for propon Use "APPLICA	ICES AND REPORTS tals to drill or to deepen or plug tion FOR PERMIT—" for such	ON WELLS back to a different reservoir. proposals.)	G. IF INDIAN, ALLOT	SE OR TRIBE NAME
OIL GAB IYY			7. UNIT AGREEMENT	MAME
WELL WELL XX OTHER	RE	CEIVED	Diamond Ca 8. FARM OR LEAGE N	nyon II Unit l
P. O. Box 3249. Engley	wood, CO	T 0 2 1985	9. WHELE INO. 15-15	
LOCATION OF WELL (Report location of See also space 17 below.) At surface	early and in accordance with an DIV	SION OF OIL S & MINING	10. FIELD AND POOL, Entrade Te 11. SHC., T., M., O SULVEY OR AR	S.T.
3338' FSL, 1522' FEL			Sec. 15. T	18S. R22E
4. PERMIT NO.	15. BLEVATIONS (Show whether E	F. ST, GS, etc.)	12. courts on Pani	IE 18. STATE
Check Ap	propriate Box To Indicate (Nature of Notice, Report		·
NOTICE OF INTENT	FION TO:	1	BUBSEQUENT REPORT OF:	
PRACTURE TREAT	CLL OR ALTER CASING	WATER SHUT-OFF FRACTURE TREATMENT		
.	HANGE PLANE	(Other) Restora		
The referenced well was September 5, 1985. The Robbens on September 5	s reclaimed on Agugs e location was inspe	st 26, 1985 and re	seeded per BLM gu	idelines on
to a				
•				
	,		-	
SIGNED SIGNED	the and correct	nior Regulatory An	layst DATE 9	/27/85

*See Instructions on Reverse Side

DATE

APPROVED BY CONDITIONS OF APPROVAL, IF ANY: